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20995  
KNOBBE MARTENS OLSON & BEAR LLP  
2040 MAIN STREET  
FOURTEENTH FLOOR  
IRVINE, CA 92614

CONFIRMATION NO. 1828

## FILING RECEIPT



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Date Mailed: 01/13/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Sumit Bhaduri, Maharashtra, INDIA;  
Virenda Kumar Gupta, Maharashtra, INDIA;

VIRENDR A

## Power of Attorney:

Karoline Delaney-44058

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/IN02/00015 01/25/2002

## Foreign Applications

Projected Publication Date: 04/21/2005

Non-Publication Request: No

Early Publication Request: No

## Title

Olefin polymerisation titanium catalyst

**Preliminary Class**

526

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Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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KHAT5.001



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Sumit Bhaduri and Virendra Kumar Gupta  
Appl. No. : 10/502,219  
Filed : July 21, 2004  
For : OLEFIN POLYMERISATION TITANIUM  
CATALYST

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313, on

April 7, 2005

(Date)

Connie C. Tong, Reg. No. 52,292

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner for Patents  
P.O. Box 1450  
Office of Initial Patent Examination  
Customer Service Center  
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby request that the Official Filing Receipt, a copy of which is enclosed, be corrected to reflect the true spelling of the second-named inventor (Virendra Kumar Gupta) in the above-referenced patent application, as set forth on the first page of the attached PCT publication No. WO 03/062,283. Presently, the Filing Receipt incorrectly shows the first name of said inventor as "Virenda", when it should be listed as "Virendra."

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: April 7, 2005

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(71) Applicant (*for all designated States except US*): **RELIANCE INDUSTRIES LIMITED** [IN/IN]; Maker Chambers IV, Nariman Point, Mumbai 400 021, Maharashtra (IN).

**Declarations under Rule 4.17:**

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

— *of inventorship (Rule 4.17(iv)) for US only*

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

WO 03/062283 A1

(54) Title: AN OLEFIN POLYMERISATION TITANIUM CATALYST

(57) Abstract: An olefin polymerisation titanium catalyst. It comprises a titanium compound and an organoaluminium compound cocatalyst supported on a soluble polysulfone comprising free reactive sulfone groups. The molar ratio of titanium to aluminium is 1-10 : 200 and the weight ratio of titanium to polysulfone is 0.01-0.1 : 0.3-2.5. The process for preparing the catalyst comprises preparing a supported titanium compound by contacting a solution of a polysulfone in a halogenated or polar solvent with a titanium compound or a solution thereof in a halogenated or polar solvent in an inert atmosphere at a temperature between 10 °C and the boiling point of the solvent such that the weight ratio of titanium to polysulfone is 0.01-0.1 : 0.3-2.5. The supported titanium compound is mixed with an organoaluminium cocatalyst such that the molar ratio of titanium to aluminium is 1-10 : 200.